Amendments to the Claims:

This following listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1-9. (Cancelled)

- 10. (Currently Amended) The device of claim 15, further comprising a hand support at the housing opening, said the hand support being adjustable to vary the size of the opening.
- 11. (Currently Amended) The device of claim 10, wherein said the hand support receives the palm of a human hand and the top of said the opening is curved to generally fit the profile of [[a]] the human hand across the top of the hand.

12 - 14. (cancelled)

- 15. (Currently Amended) A measuring device for non-invasively measuring levels of constituents in blood and tissue in a subject, said the measuring device comprising:
 - (a) a housing having an opening for receiving a hand of the subject;
 - (b) a polychromatic light source that emits a broad spectrum of light in the near infrared range and adjacent visible light;

- (c) a part receptor shaped for receiving a finger of said the subject, said the part receptor being located relative to said the light source so that when said the finger of said the subject is placed in the part receptor, said the light source can be activated and light from said the light source can be directed onto said the finger, said the part receptor [[is]] being shaped to receive said the part finger in close alignment, so as to reduce extraneous light;
- (d) a light receptor for collecting a continuum of wavelengths over said the broad spectrum of light after said the broad spectrum of light has been directed onto said the finger;
- (e) a dispersion element coupled to said the light receptor for dispersing light collected by said the light receptor into a dispersed spectrum of component wavelengths;
- (f) a photodetector coupled to said the dispersion element for taking absorbance measurements from said the dispersed spectrum and producing a measurement signal;
- (g) a communications interface connectable to an external computer for
 communicating said the measurement signal to said the external computer, and
- (h) a power interface connectable to an external stabilized power source.
- 16. (Currently Amended) The device of claim 15, wherein said the polychromatic light source is connected to said the power interface.

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17. (Currently Amended) The device of claim 15, further comprising said the external computer, wherein said the external computer controls at least one function of said the compact measuring device, said the computer including means for receiving said the measurement signal.

- 18. (Currently Amended) The device of claim 17, further comprising an analog to digital converter for converting said the measurement signal into a digital measurement signal for communication to said the computer.
- 19. (Currently Amended) The device of claim 17, wherein, said the external computer includes a memory element, a storage element, and a software element for storing a plurality of said measurement signals for a plurality of measurements.
- 20. (Currently Amended) The device of claim 17, wherein, said the external computer includes a memory element, a storage element, and a software element for storing, retrieving and displaying dosage information corresponding to measurement signals received by said the computer from said the device.
- 21. (Currently Amended) The device of claim 17, further comprising said the external stabilized power source.

- 22. (Currently Amended) The device of claim 21, wherein said the external stabilized power source is provided by said the external computer.
- 23. (Currently Amended) The device of claim 15, further comprising said the external stabilized power source.
- 24. (Currently Amended) The device of claim 15, wherein said the subject is a human or an animal.